

Exhibit 1

CURRICULUM VITAE

Eric R. Fearon
Emanuel Maisel Professor of Oncology
Professor of Internal Medicine, Human Genetics, and Pathology
Molecular Medicine & Genetics Division
University of Michigan Medical School
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CURRICULUM VITAE**NAME** Eric R. Fearon**EDUCATION**

Sept 1975- Jun 1979 Mount Blue High School, Farmington, Maine
 Aug 1979-May 1983 The Johns Hopkins University, Baltimore, MD; B.A. (Biophysics)
 Aug 1983-May 1990 The Johns Hopkins University School of Medicine; M.D.
 Aug 1985-May 1990 The Johns Hopkins University; Ph.D. (Biology/Program in Human Genetics; mentor - Dr. Bert Vogelstein)

POSTDOCTORAL TRAINING

Jun 1990 - Aug 1992 Johns Hopkins University School of Medicine, Hematology Division, Dept. of Medicine & the Oncology Center (mentor - Dr. Chi Van Dang)

CERTIFICATION AND LICENSURE

None

MILITARY SERVICE

None

ACADEMIC APPOINTMENTS

1992-1995 Assistant Professor, Depts. of Pathology and Biology, Yale University School of Medicine; Member, Program in Molecular Oncology & Development
 1995 - 2001 Associate Professor, Departments of Internal Medicine (Div. of Medical Genetics), Human Genetics, and Pathology, University of Michigan
 1995 - Emanuel N. Maisel Professor of Oncology, University of Michigan
 1995 - Associate Director for Basic Research, University of Michigan Comprehensive Cancer Center
 2001- Professor, Departments of Internal Medicine (Div. of Medical Genetics), Human Genetics, and Pathology, University of Michigan
 2005- Deputy Director, University of Michigan Comprehensive Cancer Center
 2010- Division Chief, Molecular Medicine & Genetics, Department of Internal Medicine, University of Michigan

RESEARCH INTERESTS

Molecular analysis of cancer pathogenesis; η -catenin-dependent Wnt signaling; transgenic and knockout mouse models of colon cancer; miRNAs and cancer; CDX2 homeobox gene function
 The research in the Fearon laboratory seeks to address the means by which specific oncogene and tumor suppressor gene defects contribute to the pathogenesis of colon and other cancers and to develop novel strategies for early detection and treatment of colorectal adenomas and carcinomas.

EXTRAMURAL GRANT SUPPORT**ACTIVE**

2 R01 CA08223-11A2 (Fearon) 09/01/11 – 07/31/16 15%
 NIH/NCI \$175,000 annual direct \$1,356,250 entire project direct

CDX-2 Tumor Suppressor Pathway Defects in Colon Cancer

Major goals of the project are the following: I) Define the contribution of *Cdx2* defects in colon tumor development using mouse genetically engineered models of tumor development. II) Define the role of *p53* mutations in promoting colorectal adenoma-carcinoma progression.

2R01 CA094172-09 (Cho) 07/01/07 – 05/31/12 2.5%
 NIH/NCI \$187,250 annual direct \$881,181 entire project
 direct

Molecular Pathogenesis of Ovarian Endometrioid Adenocarcinomas

Aims are: 1) To continue efforts to identify and characterize β -cat/Tcf regulated genes important in OEA pathogenesis; 2) To complete a comprehensive mutational analysis of genes encoding proteins known to regulate PI3K/Akt/Pten signaling in OEAs, and to define a gene expression signature associated with defects in this signaling pathway; 3) To define and characterize key downstream transcriptional target genes linked to deregulated PI3K/Akt/Pten signaling in OEA pathogenesis; and 4) To continue efforts to develop and characterize mouse models of OEA, and to use gene expression profiling as a means to determine how well murine tumors arising in the setting of specific genetic alterations recapitulate human OEAs.

2 P30 CA46592-24 (Wicha) 06/1/06 – 05/31/12 30%
 NIH/NCI \$3,943,869 annual direct \$30,896,886 entire project direct

University of Michigan Comprehensive Cancer Center Core Grant

Fearon - Basic Science Director/Deputy Director

Aims of the University of Michigan Cancer Center core grant are: To provide support for Cancer Center research programs, core facilities, leadership, and development activities. Dr. Fearon serves as the director of research in the Basic Science Division and as deputy director of the Cancer Center

2 P30 CA46592-24 (Wicha) 06/1/06 – 05/31/12 5%
 NIH/NCI \$3,943,869 annual direct \$30,896,886 entire project
 direct

University of Michigan Comprehensive Cancer Center Core Grant

Fearon - Program Co-Leader.

Aims of the University of Michigan Cancer Center core grant are: To provide support for Cancer Center research programs, core facilities, leadership, and development activities. Dr. Fearon serves as co-leader of the Cancer Genetics Program

2 P50 CA093990-07A1 (Ross) 09/22/08 – 03/31/13 2%
 NIH/NCI (P50 com ren) \$229,462 annual direct \$1,961,165 annual project direct

In Vivo Imaging of Neoplasia

Goal: The studies proposed here will result in the identification of novel therapies as well as imaging biomarkers that report on key molecular events and therapeutic response will be identified. These studies will enable individualization of cancer therapy.

U54 CA136429-02 (Wang) 10/01/08 – 09/30/13 2%
 NIH/NCI \$57,790 (Project 1) annual direct \$722,254 entire project direct

In Vivo Detection of Neoplasia in the Digestive Tract

The goal is to develop novel optical imaging probes and instruments that can be evaluated in pre-clinical models, as well as translated to the clinic as a practical screening tool for the early detection of cancer in hollow organs.

1 R01 CA142750-01 (Wang) 02/25/10 – 12/31/14 2%
 NIH/NCI \$334,478 annual direct \$1,672,766 entire project direct

Targeted Multi-Spectral Dual Axes Confocal Imaging of In Vivo Molecular Expression

The broad, long-term objective of the project is to develop a miniature intravital microscopy imaging instrument to study molecular mechanisms of cancer development in epithelial tissues of live animals.

W81XWH-09-2-0014 (Wicha) 06/15/11 – 06/14/12 5%
 Department of Defense (Fearon- project leader, project #1) \$109,262 annual direct project #1
National Functional Genomics Center \$1,748,000 entire project direct
 Goals: I) Generate new mouse models of colon cancer via use of CDX2 transgenic elements to over-express potential oncogenes (CDK8) and CDX2-Cre transgenes to inactivate potential tumor suppressor genes (Nf1) and activate oncogenes (Kras and Braf); and II) Generate new mouse models of ovarian cancer via the use of adenoviral Cre recombinase injection into the ovarian bursa to activate candidate oncogenes (PI3KCA) and inactivate tumor suppressor genes (Brca1, Nf1, pRb)

1 P50 CA130810-01A2 (Brenner) 09/1/2010 – 08/31/15 5%
 NIH/NCI \$1,608,284 direct costs Year 1 for entire P50 \$8,041,420 entire project direct
 Translational Research in GI Cancer – GI SPORE
 Developmental Research Projects (Fearon – director of DRP)
 The goal of the Developmental Research Projects program in the University of Michigan GI SPORE is to support innovative gastrointestinal cancer research with high translational impact. The DRP program will solicit and review pilot/early stage research projects and will make recommendations to the GI SPORE oversight/leadership committee. Dr. Fearon will be charged with identifying, reviewing, and prioritizing research proposals, as well as providing advice about how to pursue the work in the longer term via external peer-reviewed mechanisms.

Recent

2 R01 CA085463-10 Fearon (PI) 06/01/00-11/30/10 20%
 NIH/NCI \$181,340 (direct annual)
 “The Role of β -catenin/Tcf Pathway Defects in Cancer”
 Specific aims are: I) To identify downstream genes whose expression is specifically regulated by β -catenin/TCF in colon and other cancer cells where β -catenin is constitutively activated. II) To utilize robust model systems to assess the role of selected β -catenin/TCF target genes and their protein products in the altered phenotype of colon and other cancer cells. III) To assess the role of selected β -catenin/TCF target genes in intestinal and colonic tumorigenesis, using mouse transgenic and knockout models.

2 R56 CA082223-11 Fearon (PI) 09/01/09 - 08/31/10 15%
 NIH/NCI
 “CDX-2 Tumor Suppressor Pathway Defects in Colon Cancer”
 The specific aims are: I) Conclusively establish that *Cdx2* functions as a “gatekeeper” in inhibiting colonic adenoma formation and that bi-allelic *Cdx2* defects promote adenoma development via mechanisms distinct from the consequences of Apc inactivation. II) Define if and how somatic *p53* missense mutations, but not *p53* null mutations, have potent ability to promote colorectal adenoma-carcinoma progression. III) Determine if the mouse *Mre11* gene functions as a TSG in adenoma-carcinoma progression and, if so, whether *Mre11* inactivation promotes genomic instability in tumors..

2 RO1 CAS1488-10 Gruber (PI) 01/01/99-03/31/09 5%
 NIH/NCI \$1,145,016 (direct annual)
 “Molecular Epidemiology of Colorectal Cancer”

Major goals are to measure risks of developing cancer associated with the APC I1307K allele; to identify and measure potential effect modification of genetic and environmental risks in colorectal cancer pathogenesis in those carrying the APC I1307K allele; to define the somatic mutational spectrum in the APC gene in colorectal cancers arising in those who carry the APC I1307K allele; and to establish a resource for further epidemiologic studies and genome screening to map novel, low penetrance colorectal cancer genes.

HONORS AND AWARDS

1983	Phi Beta Kappa (Johns Hopkins University)
1983	Martin G. Larrabee undergraduate prize for research in biophysics, Johns Hopkins University
1990	Alpha Omega Alpha Honor Medical Society (Johns Hopkins University School of Medicine)
1990	David Israel Macht Prize for Basic Science Research (Johns Hopkins University School of Medicine)
1990	Wilson S. Stone Award, UT, M.D. Anderson Cancer Center
1992-1995	McDonnell Fellow in Molecular Medicine in Cancer Research, James S. McDonnell Fund
1994	Ruppert B. Turnbull Memorial Lectureship, Visiting Professor, Department of Surgery, Jewish Hospital of St. Louis and Washington University School of Medicine
1996	Louis J. Cole Lecture, Faculty of Medicine, University of Toronto
1997	Co-Organizer, Keystone Symposium on "Genetics of Human Cancer: Pathogenesis and Diagnosis"
1998	American Society for Clinical Investigation
2000	Lynch Lectureship, University of Notre Dame, Department of Biology, Molecular Biosciences Program
2001	Vice Chair, Gordon Research Conference on Cancer (Newport, RI)
2002	Chair, Gordon Research Conference on Cancer (Newport, RI)
2003	Association of American Physicians
2005	Third Annual DSR Sarma Lectureship in Oncologic Pathology, University of Toronto
2007	Johns Hopkins University Society of Fellows
2009	Co-organizer, Keystone Symposium on "Emerging Themes in Tumor Suppressors: Function and Clinical Implications in the Post-Genomic Era"

MEMBERSHIPS AND OFFICES IN PROFESSIONAL SOCIETIES

	Phi Beta Kappa (1983)
	Alpha Omega Alpha (1990)
	American Association for Cancer Research
1994-5	State Legislature Committee
1995-98	Publications Committee
1996-99	Board of Directors
	American Society for Clinical Investigation (1998 - present)
2003-4	Vice President
2004-5	President-Elect
2005-6	President
	Association of American Physicians (2003 - present)

SCIENTIFIC ACTIVITIES

Editorial Boards

1993-	Associate Editor, <i>Cancer Research</i>
1995-	Editorial Board, <i>Genes, Chromosomes, & Cancer</i>

1996-2003 Editorial Board, *Human Molecular Genetics*
 1996-2005 Editorial Board, *Laboratory Investigation*
 1996-2004 Associate Editor, *Clinical Cancer Research*
 1997-99 Editorial Board, *Cell Growth & Differentiation*
 1997-2002 Associate Editor, *The Journal of Clinical Investigation*
 1999- Editorial Board, *Current Biology*
 1999- Editorial Board, *Neoplasia*
 2000-2002 Editor, *Cell Growth & Differentiation*
 2002- Senior Editor, *Molecular Cancer Research*
 2002- Consulting Editor, *The Journal of Clinical Investigation*
 2002-2005 Deputy Editor, *Molecular Medicine*
 2005-2010 Editorial Board, *Journal of Biological Chemistry*
 2007 - Associate Editor, *Clinical and Translational Science*
 2009- Scientific Editor, *Translational Oncology*
 2010- Editorial Board, *Gastroenterology*

Journal Reviewer Positions 2011

Cancer Cell
Cell
Clinical Cancer Research
EMBO Journal
EMBO Reports
Journal of Biological Chemistry
Molecular Cell Biology
Nature
Oncogene
American Journal of Pathology
Laboratory Investigation

Study Sections and Site Visits

1991 NIH, Ad Hoc Member, IRG Pathology B
 1992 NIH, Site Visit Team, Mayo Cancer Center Core Grant
 1994 NIH, Ad Hoc Member, IRG Pathology B
 1995 NIH, Site Visit Team, NCI Immunology Branch, FCRC
 1995 DOD Breast Cancer, Member, IRG Path PB4
 1996-2000 NIH, Pathology B Study Section Ad Hoc Member
 1998-2003 Damon Runyon Walter Winchell Cancer Research Fund, Scientific Advisory Committee
 1999-2003 NIH, Pathology B Study Section, Member
 2001-2003 NIH, Pathology B Study Section, Chair
 2003-2004 NIH, Cancer Genetics Study Section, Member and Chair
 2006 NIH, Special Emphasis Panels (X2), Chair
 2007 NIH, Special Emphasis Panel, Chair
 2008 NIH, Molecular Oncogenesis Study Section
 2008 NIH, Special Emphasis Panel (X2)
 2009 NIH, CAMP Study Section, Member
 2009 NIH, Special Emphasis Panel, Chair
 2009 - Member, Cancer Prevention and Research Institute of Texas, Basic Cancer Research Review Committee 3
 2010-2012 College of CSR Reviewers
 2010 NIH, Special Emphasis Panel; RC4 Review, Chair

Federal Scientific Advisory and Oversight Committees

1992-1995	Member, Board of Scientific Counselors, Division of Cancer Prevention and Control, National Cancer Institute, National Institutes of Health
1995	Member, Panel to Assess the NIH Investment in Research on Gene Therapy
1996	Member, NCI Board of Scientific Counselors Interim Working Group
1996-1997	Member, NCI Developmental Diagnostics Working Group
1996-1997	Member, NCI Prevention Review Group
1996-1999	Member, Board of Scientific Advisors, National Cancer Institute, National Institutes of Health
1997-1998	Member, National Human Genome Research Institute Scientific Planning Subcommittee

TEACHING ACTIVITIES AND TRAINEES

Specific University of Michigan Teaching Activities (Lectures/Seminars)

Graduate

Human Genetics 803 - November 28, 1995, December 4, 1995 (2hr/seminar)
Human Genetics 542 - February 2, 5, 7, 1996 (1 hr/lecture)
Human Genetics 803 - October 16, 23, 30, 1996, November 6, 1996 (2 hr/seminar)
Human Genetics 542 - February 10, 12, 14, 1997 (1 hr/lecture)
Human Genetics 541 - December 1, 3, 5, 1997 (1 hr/lecture)
Human Genetics 803 - October 22, November 19, December 3 & 10, 1997 (2 hr/seminar)
Human Genetics 542 - February 11, 13, March 13, 1998 (1 hr/lecture)
Micro/Immun/Path 553 (Cancer Biol) – October, 1998; 2X 1.5 hr lecture
Human Genetics 803 - October 21, 28, November 4, 13, 1998 (2 hr/seminar)
Human Genetics 542 - March 8, 10, 12, 1999 (1 hr/lecture)
Micro/Immun/Path 553 (Cancer Biol) – October, 1999; 2 X 1.5 hr/lecture
Human Genetics 803 - October/ November 1999 (4 seminars; 2 hr/seminar)
Human Genetics 542 - March 6, 8, 10, 2000 (1 hr/lecture)
ACB 680 (Organo) – Sept 21, 2000 (1.5 hr/lecture)
Human Genetics 803 – September 6, 13, 20, 27, 2000 (4 seminars; 2 hr/seminar)
Micro/Immun/Path 553 (Cancer Biol) – October 10 & 12, 2000; (2 X 1.5 hr/lecture)
Human Genetics 542 – February 21, March 7, 12, 2001 (3 X 1 hr/lecture)
Micro/Immun/Path 553 (Cancer Biol) – October 9 & 11, 2001; (2 X 1.5 hr/lecture)
Human Genetics 803 – November 7, 14, 28, December 8, 2001; (4 seminars; 2 hr/seminar)
Human Genetics 541 – December 3, 5, 2001; (2 X 1 hr/lecture)
Human Genetics 542 – February 11, 13, 14, 2002; (3 X 1hr/lecture)
Micro/Immun/Path 553 (Cancer Biol) – October 1 & 3, 2002; (2 X 1.5 hr/lecture)
Human Genetics 803 – Oct. 30, Nov. 6 & 13, December 4, 2002; (4 seminars; 2 hr/seminar)
Human Genetics 542 – February 19, March 3 & 5, 2003 (3 X 1hr/lecture)
Micro/Immun/Path 553 (Cancer Biol) – October 7 & 21, 2003; (2 X 1.5 hr/lecture)
Human Genetics 542 – February 18, March 1 & 3, 2004; (3 X 1 hr/lecture)
Human Genetics 804 – March 10, 17, 24, 31, 2004 (4 seminars; 2 hr/seminar)
Micro/Immun/Path 554 (Cancer Biol) – October 7, 2004 (1.5 hr/lecture)
Pathology 582 – November 8, 10, 15, 17, 2004 (1 hr/seminar)
Human Genetics 803 – November 17, December 1, 8, 2004 (2 hr/seminar)
Human Genetics 542 – February 16, 18, 23, 2005 (1 hr/lecture)
Human Genetics 803 – Sept. 28, Oct. 5, 12, 2005 (2 hr/seminar)
Micro/Immuno/Path 554 (Cancer Biol) – October 6, 2005 (1.5hr/lecture)
Human Genetics 542 – February 13 and 22, 2006 (1 hr/lecture)
Human Genetics 803 – Sept 6, 13, 20, 27, 2006 (1.5 hr/ seminar)
Cell Developmental Biology 682 – Sept 19, 28, 2006 (1.5 hr/lecture and panel discussion)
Pathology 582 – Sept 25, 27, Oct 2, 4, 2006 (1 hr lecture/seminar)
Micro/Immuno/Path 554 (Cancer Biol) – October 5, 2006 (1.5hr/lecture)
Cell Developmental Biology 680 – Sept 25, 2007 (1.5hr/lecture & discussion section)

Micro/Immuno/Path 554 (Cancer Biol) – October 2, 2007 (1.5hr/lecture)
 Pathology 582 – Nov 5, 7, 12, 14, 2007 (1 hr lecture/seminar)
 Pharmacology 502 – Spring 2008 (1.5 hr/seminar X 6 weeks)
 Cancer Biology 553 – October 14, 2008 (1.5 hr/seminar)
 Pathology 582 – Nov 17, 19, 24, Dec 1, 2008 (1 hr/lecture/seminar)
 Pharmacology 502 – Spring 2009 (1.5 hr/seminar X 6 weeks)
 Cancer Biology 553 – November 2009 (1.5 hr/seminar)
 Pathology 582 – Nov 16, 18, 23, 25, 2009 (1 hr/lecture/seminar)
 Pharmacology 502 – Winter 2010 (1.5 hr/seminar X 8 weeks)
 Cancer Biology 553 – Oct 26, 2010 (1.5 hr/seminar)
 Pharmacology 502 – Winter 2011 (2 hr/seminar X 8 weeks)
 Cancer Biology 553 – September 15, 2011 (1.5 hr/lecture)
 Pathology 582 – October 10, 12, 19, 24, 26, 2011 (1 hr/seminar)
 CDB680 – Oct 25, Nov 11 2011 (1.5 hr/seminar)

Medical School

MS1 students - November 29 & December 1, 1995 - “Cancer Genetics, Parts 1 & 2” (1hr/lecture)
 MS2 students - January 5, 1996 - “Molecular Genetics of Colorectal Cancer” (1hr/lecture)
 MS2 students - September 18, 1996 - “Overview of Cancer Genetics” (1hr/lecture)
 MS2 students - January 10, 1997 - “Molecular Genetics of Colorectal Cancer” (1hr/lecture)
 MS2 students - September 17, 1997 - “Molecular Genetics of Cancer, I and II” (2 hr/lecture)
 MS2 students - January 9, 1998 - “Clinical Appls of Colorectal Cancer Genetics” (1hr/lecture)
 MS2 Students - December 3, 1998 - "Molecular Biology of Cancer, I and II" (2 hr/lecture)
 MS2 Students - January 8, 1999 - "Molecular Biology of Colorectal Cancer" (1 hr/lecture)

Post-doctoral Fellows

September 9-13, 1996, September 2-6, 1997, September 8-12, 1998, Aug. 30-Sept. 3, 1999; July 25-28, 2000 and Aug. 21-25, 2000; August 6-10, 2001; August 12-16, 2002; August 4-8, 2003; August 9-13, 2004; August 15-19, 2005 - University of Michigan post-doctoral training program for clinical scientists (6-8 hr/day)

Institutional Conferences

University of Michigan Pediatric Hematology Oncology Conference – January 15, 2003
 University of Michigan Department of Internal Medicine Research Conference – March 5, 2003
 University of Michigan Department of Internal Medicine Grand Rounds – March 14, 2003
 University of Michigan Renal Division Research Conference – November 7, 2006
 University of Michigan Dental School Research Conference – December 13, 2007
 University of Michigan Hematology-Oncology Research Conference – January 18, 2010
 University of Michigan Pediatric Hematology Oncology Research Conference – March 16, 2011

Trainees

Current Postdoctoral Fellows

Joerg Zeller, PhD – 01/18/10 -
 Division of Molecular Medicine & Genetics, Dept of Internal Medicine, University of Michigan Medical School

Current Thesis (PhD) Students

Serina Mazzioni, BS – Sept 16, 2010-
 Human Genetics

Previous University of Michigan Post-doctoral:

Badal Roy, PhD – 09/01/09 – 10-31-11
 Present position – Research Associate, University of Kansas Medical School, Kansas City, KS

Edward Jae-Hoon Kim, M.D., Ph.D., 09/08/08 – 10/5/09
Present position, Clinical Fellow, Division of Hematology/Oncology, Department of Internal Medicine, University of Michigan School of Medicine

Guido Bommer, M.D., 05/01/04 – 1/30/09
Present Position: Research Investigator, Université Catholique, De Louvain, Institute of Cellular Pathology, Ludwig Institute, Brussels Belgium

Pallavi Chatuvedi, Ph.D., 11-01-07 – 1-30-09
Present Position – Post-doctoral fellow, Johns Hopkins University

Aytekin Akyol, M.D. – 6/01/02 – 5/31/07
Present Position – Assistant Professor, Department of Pathology, Hacettepe University School of Medicine, Ankara, Turkey

Takao Hinoi, M.D., Ph.D. - 06/01/98 – 07/31/06
Present Position – Assistant Professor, Department of Surgery, Hiroshima University School of Medicine

Nam-Gyun Kim, Ph.D. – 3/01/03 – 3/05/05
Present Position – Postdoctoral fellow, Dept of Cell Biology, University of Virginia School of Medicine

Ying Feng, Ph.D. – 9/11/00 – 8/31/03
Present position - Research Investigator, Division of Molecular Medicine & Genetics, Department of Internal Medicine, University of Michigan School of Medicine

H.R. Nana Lee, Ph.D. – 9/25/00 – 7/31/02
Present position – Product Manager & Sr. Res Scientist, DNA Software, Inc., Ann Arbor, MI
Marvin T. Nieman, Ph.D. - 1/17/00-8/15/01
Present position – Research Fellow, Department of Internal Medicine, University of Michigan

Frank Kolligs, M.D. - 10/01/97- 7/31/00
Present position – Assistant Professor – Department of Gastroenterology, University of Munich

Balthasar J. Stähelin, M.D. - 6/24/99-6/30/00
Resident in Internal Medicine, University of Basel, Switzerland

Mary T. Hawn, M.D. - 07/01/95 - 6/30/96
Present position – Assistant Professor, Department of Surgery, University of Alabama-Birmingham

Vandana A. Bharucha, Ph.D. - 03/01/96 - 09/01/97
Present position – Administrative support, National Institute of Child Health and Human Development, National Institutes of Health, Bethesda, MD

Karel Caca, M.D. - 10/21/96 -12/31/98
Present Position - Assistant Professor, Department of Gastroenterology, University of Leipzig

Gang (Ken) Hu, Ph.D. - 03/15/97 -08/24/99
Present Position – Research Scientist, Department of Bioinformatics, Pfizer, Ann Arbor, Michigan

Masashika Tani, M.D., Ph.D. - 04/10/99-03/31/01
Present Position – Assistant Professor, Biology Division, National Cancer Center Research Institute, Tokyo, Japan

Previous Yale University Post-doctoral:

Robert H. Getzenberg, PhD - 08/01/92 - 02/01/94
Present position - Director of Research of the James Buchanan Brady Urological Institute and Professor of Urology, Johns Hopkins University School of Medicine

Michael A. Reale, MD, PhD - 07/01/92 - 06/30/95
Present position - Private medical oncology practice, Waterbury, Connecticut.

William E. Pierceall, PhD - 08/01/92 - 06/30/95
Present position - Scientist, Cetak Corporation, Marlborough, MA

Sridhar Mani, MD - 02/01/94 - 06/30/95
Present position – Associate Professor, Departments of Medicine (Section of Hematology-Oncology) and Molecular Genetics, Albert Einstein University School of Medicine

Current Thesis Committees

Joseph Dolsch	CDB, Committee Member, 08/05 –
Kenneth Krill	CMB, Committee Member, 10/08 –
Mo Weng, B.S.	CDB, Committee Member, 12/08 –
Michele Gornick	Hum Gen, Committee Member, 3/07 –
Devin Rosenthal	CMB, Committee Member, 10/09 –
Jill Haenfler	CMB, Committee Member, 02/10 –
Peng Zhang	Pathology, Committee Member, 4/10 –
Bernadette Zwanns	Pathology, Committee Member, 11/10-
Tamar Feinberg	CMB, Committee Member, 02/11-

Previous Dissertation/Thesis Students of Fearon – University of Michigan

Karen Hajra (Jones), B.S. - 06/23/97 – 11/05/01
MSTP student; CMB Graduate Program, University of Michigan School of Medicine; Thesis – “Mechanisms and Factors Critical in Regulating E-cadherin and Beta-Catenin Expression and Function in Carcinomas”

Janet Leung, B.S. - 09/12/99 – 10/15/03
Thesis student; Department of Human Genetics, University of Michigan School of Medicine
“Identification and Functional Analyses of β -catenin/TCF Target Genes

David Van Mater, B.A. – 06/12/00 – 08/15/04
MSTP student; Human Genetics Graduate Program, University of Michigan School of Medicine
“A Role for β -catenin in Development and Disease”

Ira Winer, B.A. – 09/01/01 – 8/28/05
MSTP student; CMB Graduate Program, University of Michigan School of Medicine
“Analysis of Beta-Catenin’s Amino-Terminal Domain and ITF-2, A Beta-Catenin/TCF-Regulated Gene, in Neoplastic Transformation”

Andrew Kaczorowski, B.A. – 07/01/06 – 08/31/08
Cell and Molecular Biology Graduate Program

Previous Doctoral Thesis Committee Membership – University of Michigan

Carey Nien-Kai Lumeng – 09/95-05/98

Human Genetics Graduate Program, University of Michigan School of Medicine
“Characterization of Dystrophin and Utrophin Expression and Identification of Novel Associated Proteins”

Daniel J Becker – 02/99-05/02
MSTP; Cell and Molec Biology Graduate Program, University of Michigan School of Medicine
“Genetic and Biochemical Determinants of Fucosylated Glycan Expression”

Bethany Lynn Neill – 06/00-05/03
Epidemiological Sciences Graduate Program, University of Michigan School of Medicine
“Colorectal cancer Epidemiology: Genes, Environment, and History”

Reid Alisch – 08/99-03/04
Human Genetics Graduate Program, University of Michigan School of Medicine
“Unconventional Translation of Human LINE-1 ORF2”

Jingmei Lin – 06/00-05/04
Pathology Graduate Program, University of Michigan School of Medicine
“Kielin/Chordin-Like Protein 1/KCP1, A Novel Extracellular Regulator in the TGF-beta Family Signaling Pathway”

Ayse Elif Erson – 05/00-06/04
Human Genetics Graduate Program, University of Michigan School of Medicine
“The Early G2/M Checkpoint and Ubiquitination: Implications for Breast Tumorigenesis”

Tammy Morrish – 09/01-07/05
Human Genetics Graduate Program, University of Michigan School of Medicine
“Endonuclease-independent LINE-1 Retrotransposition”

Jenny Poynter – 09/03-08/05
Epidemiological Sciences Graduate Program, University of Michigan School of Public Health
“Molecular Epidemiology of Colorectal Cancer: Mechanisms of Risk and Clues Towards Chemoprevention”

Qian Wang, B.S. – 5/25/05 – 07/03/07
Biol Chem Graduate Program, University of Michigan School of Medicine
“The Role of PALS1 in Mammalian Epithelial Polarity”

Abigail Fahim, B.A. – 09/01/03 – 08/17/07
MSTP student; Human Genetics Graduate Program, University of Michigan School of Medicine
“Directed Evolution and in Vivo Function of Plasminogen Activator”

Stephen Yang – 10/1/2004 – 8/19/2008
CMB Graduate Program, University of Michigan School of Medicine
“Hedgehog-Wnt interactions during pathologic epithelial bud development and skin tumorigenesis”

Qi Cao, B.S. – 09/01/03 – 08/15/08
Pathology Graduate Program, University of Michigan School of Medicine
“The Role of Polycomb Group Protein EZH2 in Cancer Progression”

Jinhee Chang, M.S. – 09/01/04 – 08/15/08
MCDB Graduate Program, University of Michigan School of Medicine
“General and Tissue Specific Gene Regulation by the WNT Signaling Drosophila”

Tyler Prestwich – 9/01/04 – 12/14/08
CMB Graduate Program, University of Michigan School of Medicine
“A Role for sFRP5 in Adipocyte Biology and Obesity”

Neethan Lobo – 12/01/04 – 4/16/09
CMB Graduate Program, University of Michigan School of Medicine
“Analysis of Murine Mammary Epithelial Cellular Hierarchy”

Alex Kim – 01/06 – 4/21/09
CMB Graduate Program, University of Michigan School of Medicine
“The Role of Wnt/ β -catenin Pathway in Adrenocortical Development and Tumorigenesis”

Will Brandt – 08/01/06 – 05/01/09
CMB Graduate Program, University of Michigan School of Medicine
“The Role of Gata2 in Hematopoietic and Vascular Development”

Grant Rowe – 09/01/06 – 05/05/09
MSTP student; CMB, University of Michigan School of Medicine
“Differential Regulation of two- and three-dimensional Cell Function”

Jay Pieczynski – 06/06 – 08/10
Biological Chemistry Graduate Program, University of Michigan School of Medicine
“Regulation of Apical Polarity Complexes”

Lou Chang – 05/07 – 10/10
Cell & Developmental Biology Graduate Program, University of Michigan School of Medicine
“Insights from Murine Models of Neurofibromatosis Type I: The Etiology and Appropriate Therapeutic Windows for Peripheral Nerve Sheath Tumors”

Jae Y. Lee - 02/07- 06/10
MSTP student; Cell & Devel Biol Graduate Program, University of Michigan School of Med
“The Regulation of Signaling in Hematopoietic Stem Cell Maintenance”

Previous Thesis Students of Fearon - Yale University School of Medicine

Gang (Ken) Hu, B.S. - 09/01/92 - 03/10/97
Graduate program - Yale School of Medicine, Department of Pharmacology; Thesis - “Deleted in Colorectal Cancer (DCC) and Seven in Absentia (sina): A Tale of Protein-Protein Interaction and Degradation”

Jeffrey A. Meyerhardt, B.A. - 07/01/95 - 08/15/96
Graduate program - Yale School of Medicine; Recipient of a Howard Hughes Medical Institute Research Training Fellowship for Medical Students 1995-96; Yale Medical Thesis - “Studies of a DCC-Related Protein and a Candidate DCC Ligand”

Bradley Ekstrand, B.A. - 02/01/93 - 06/12/97
Graduate program - Yale School of Medicine, Department of Pharmacology; Thesis - “The DCC Gene in Normal and Neoplastic Brain Tissues”

Previous University of Michigan Pre-doctoral:

Charlene An, M.S. - 05/15/96 - 08/15/96; Medical student
Kajal Sitwala, B.A. - 06/20/96 - 08/16/96; MSTP rotation student
Yih-Lin Chung, M.D. - 03/01/96-05/30/97; Dept. of Human Genetics
Shannon Carskadoon, B.S. - 10/1/96-05/15/97; Dept. of Human Genetics

Murray Cotter, B.S. - 05/26/97-08/15/97; MSTP rotation student
 Yue Ge, B.S. - 09/15/97- 02/01/98; CMB program, University of Michigan School of Medicine
 Janet Leung, B.S. - 10/01/98- Dept. of Human Genetics rotation student
 Zheng Fu., M.S. - 1/15/99-4/23/99; Dept. of Microbiology & Immunology rotation student
 David Van Mater, B.A. - 5/15/99-8/18/99; MSTP rotation student
 Theresa Hyun, B.A. - 7/6/99-8/17/99; MSTP rotation student
 Heather O'Hagan, B.A. - 09/15/99-1/15/00; rotation student; Program in Biomedical Sciences
 Robert Ward, B.S. - 05/01/01-07/01/01; rotation student; Program in Biomedical Sciences
 Ian Smith, B.A. - 05/15/01-07/30/01; medical student, University of Michigan
 Ira Winer, B.S. - 07/01/01- 9/1/01; MSTP rotation student
 Scott Tomlins, B.A. - 07/08/01-8/14/01; MSTP rotation student
 Mara Steinkamp, B.A. - 09/15/01-12/18/01; PIBS rotation student
 Sabrina Spencer, B.A. - 05/01/02-06/30/03; PIBS rotation student; Human genetics MS student
 Rachael Adams, B.A. - 07/01/02-08/15/02; PIBS rotation student
 Brandi Thompson, B.A. - 09/15/02-12/19/02; PIBS rotation student
 Joseph Dosch, B.A. - 07/01/03-08/18/03; PIBS rotation student
 Xiao, Junyu, B.A. - 01/07/04-04/30/04; PIBS rotation student
 Zhang, Lixian, B.A.- 01/07/04-04/30/04; PIBS rotation student
 Grant Rowe, B.A. - 04/20/05-6/30/05; MSTP rotation student
 Andrew Kaczorowski, BA - 04/15/06-6/30/05; PIBS rotation student
 Alison Bryson, BS - 01/15/07-3/5/07; PIBS rotation student
 Andrew Hanosh, BA - 2/6/07-4/15/07; Pathology rotation student
 Tehmina Masud, MD - 9/3/07- 12/15/07; PIBS rotation student
 Trenton Baker, B.S. - 01/07/08 - 02/22/08; PIBS rotation student
 Tamar Feinberg, B.S. - 07/07/08 - 09/01/08; PIBS rotation student
 Aaron Burberry, BS - 01/04/09 - 4/30/09; PIBS rotation student
 Alexis Carulli, BS - 06/01/09-7/31/09; MSTP rotation student

Previous Yale University Pre-doctoral:

Traci Mansfield - 09/93-04/95
 Amy Woodard - 05/93-04/95
 Nader Balba - 01/93-04/93
 Holly Duncan - 06/93-09/93
 Jason Gold - 06/94-09/94
 Jerry O'Regan - 05/94-09/94
 Abraham Zafar - 07/93-06/94
 Stuart Levine - 01/93-04/94
 Hideo Makimura - 06/94-05/95
 Gus Park - 09/93-05/95

COMMITTEE AND ADMINISTRATIVE SERVICE

National

1996-9	National Surgical Adjuvant Breast and Bowel Project - Scientific Advisory Board and Genetics Advisory Committee
1995-8	Publications Committee, American Assoc. for Cancer Research
1996-9	Board of Directors, American Assoc. for Cancer Research
1997	External Advisory Committee, NIH Program Project on "Pathobiology of Colorectal Cancer" [PI - JM Jessup, Harvard Medical School]
1998-	External Advisory Committee, Mayo Cancer Center
1998-2004	External Advisory Committee (Chair), UT-Southwestern & UT-MD Anderson Cancer Center Lung Cancer SPORE
1998-2004	Clinical Science Program External Advisory Committee, Fred Hutchinson Cancer Research Center
1998-2008	Scientific Advisory Committee, Population Sciences Division, Fox Chase

Cancer Center
 2001- External Scientific Advisory Committee, Norris Cotton Cancer Center, Dartmouth Medical School
 2002- External Scientific Advisory Board, Albert Einstein College of Medicine Cancer Center
 2003-4 Scientific Advisory Committee, New York Cancer Project, Academic Development Medical Corporation, New York, New York
 2004-7 External Advisory Committee, University of Arizona Colon Cancer SPORE
 2006- External Advisory Board, Herbert Irving Cancer Center at Columbia University
 2007- Vanderbilt-Ingram Cancer Center, Jim Ayers Institute for Precancer Detection and Diagnosis
 2008- President's External Advisory Board, Fox Chase Cancer Center
 2009 - 2010 AACR Publications Emerging Technologies Task Force
 2010 - External Advisory Board, Markey Cancer Center at University of Kentucky

University of Michigan

1995- Univ. of Michigan Comprehensive Cancer Ctr. - Associate Director for Basic Research
 1995- Univ. of Michigan Comprehensive Cancer Ctr. - Program Leader - Cancer Genetics Program
 1995- Univ. of Michigan Comprehensive Cancer Ctr. Committees: Senior Leadership, Research Space (chairman); Cancer Research Support; Cancer Biology Seminar Series
 1995 Gene Therapy Task Force, University of Michigan Medical Center
 1995-1996 Advances in Internal Medicine Planning Committee
 1996-2000 University of Michigan Prostate Cancer SPORE Executive Committee
 1999-2004 University of Michigan Biological Sciences Scholar Program Search Committee
 2000-03 Facility Planning Committee and Research & Research Support Space Committee, Biomedical Sciences Research Building
 2001-04 Research Advisory Board, Dean's Office, University of Michigan School of Medicine
 2003-2010 Admissions Committee, University of Michigan School of Medicine
 2004- Chair, University of Michigan Biological Sciences Program Search Committee
 2005-2010 Admissions Executive Committee (Co-Chair 2007-9), University of Michigan School of Medicine
 2005 - Member, Cancer Biology Training Program Steering Committee
 2007- Member, CTSA Initial Review Group
 2007- Member, University of Michigan Medical School Space Policy Committee
 2007- Member, University of Michigan Medical School Chair Search Committee
 2008-9 Member, University of Michigan Medical School, Department of Internal Medicine Search Committee
 2008 Member, University of Michigan, Executive Vice President for Medical Affairs Search Committee
 2009 Co-Chair, University of Michigan Medical School Research Assessment Team
 2009-2010 Member, University of Michigan Medical School North Campus Expansion Research Scientific Planning Committee
 2009-2010 Member, University of Michigan Health System Strategic Planning Research Committee
 2009-2010 Member, University of Michigan ULAM Oversight Committee
 2010-2011 Member, University of Michigan Health System Advisory Committee on "Big Science" Initiatives
 2011 Member, University of Michigan Provost Office Academic Advisory Committee Review of the Life Sciences Institute
 2011 - Member, University of Michigan Provost Faculty Advisory Committee

CONSULTING POSITIONS

1992-2002 Onyx Pharmaceuticals, Scientific Advisory Board Member
 1996-1999 EXACT Laboratories, Scientific Advisory Board Member

**INVITED PRESENTATIONS AND MEETING ORGANIZATION
(Since 9/1/94)**

September 9, 1994 St. Vincent's Hospital, Dublin, Ireland; "The Molecular Biology of Colorectal Cancer"

September 23, 1994 International Conference on Cancer Prevention "From the Laboratory to the Clinic: Implications of Genetic, Molecular, and Preventive Research"; Strang Cancer Prevention Center, Cornell University Medical College, New York, NY; "Colon Cancer: A Molecular Paradigm"

September 24, 1994 Pennsylvania Oncologic Society Annual Meeting, Scranton, PA; "Molecular Advances in Diagnosis and Treatment of Colon Cancer"

September 28, 1994 International Congress of the Metastasis Research Society; Bethesda, MD; "Genetic Changes in Colorectal Tumor Progression"

October 28, 1994 Turnbull Memorial Lecture, Department of Surgery, Washington University School of Medicine, St. Louis, MO; "Applications of Genetics to the Management of Colon and Rectal Cancer"

October 29, 1994 Department of Surgery, Washington University School of Medicine, St. Louis, MO; General Surgery Conference - "The Search for Novel Targets for Chemotherapeutic Agents"

November 1, 1994 Department of Human Genetics, University of Michigan School of Medicine, Ann Arbor, MI; "Studies of the DCC Gene in Normal and Neoplastic Tissues"

November 10, 1994 Crozer Regional Cancer Center, Crozer-Chester Medical Center, Chester, PA; "Overview of Cancer Genetics"

November 11, 1994 Department of Biology, Haverford College, Haverford, PA; "Progress Towards a Molecular Genetic Description of Colorectal Cancer Development"

November 21, 1994 Department of Pathology & Microbiology; University of Bristol School of Medical Sciences, Bristol, United Kingdom; "Studies of the DCC Gene and Its Role in Human Cancer"

January 16, 1995 Department of Molecular Biology, Princeton University, Princeton, NJ; "Colon Cancer and Metastasis"

February 20, 1995 Philadelphia Cancer Research Association Symposium on Molecular Targets for Cancer Therapy; Thomas Jefferson Medical Center; Philadelphia, PA; "Studies of DCC Gene Expression and Function in Normal and Neoplastic Tissues"

April 11, 1995 Genetic Screening for Colorectal Cancer Workshop; Early Detection Branch, DCPC/NIH; Bethesda, MD; "Chromosome 18q Genes and Colorectal Cancer Metastasis"

April 25, 1995 University of Michigan Medical Center; 23rd Annual Advances in Internal Medicine Course; Ann Arbor, MI; "Early Indicators of Colorectal Cancer"

May 20, 1995 American Society of Clinical Oncology Annual Meeting; Los Angeles, CA; Cancer Prevention and Control Scientific Session; "Molecular Genetic Studies of Colorectal Tumorigenesis"

May 24, 1995 Department of Pathology, Wayne State University School of Medicine, Detroit, MI; "Studies of the DCC Gene in Normal and Neoplastic Tissues"

June 14-17, 1995 "Cancer Genetics and Tumor Suppressor Genes" Meeting; Hood College, Frederick, MD; Associate Organizer and Session Chair

July 5, 1995	American Association for Cancer Research; Molecular Biology in Clinical Oncology Workshop; Aspen, CO; "Progressive Gene Loss in Colon Cancer"
July 17, 1995	Gordon Research Conference on Chemotherapy of Experimental and Clinical Cancer; New London, NH; "Molecular Genetics of Colon Carcinoma"
September 5, 1995	Japanese/AGA Society of Gastroenterology Joint Symposium on Molecular Gastroenterology; Tokyo, Japan; "Colorectal Tumorigenesis: Molecular Genetic Studies and Their Clinical Applications" and "Studies of the DCC (deleted in colorectal cancer) Gene in Normal and Neoplastic Tissues"
October 27, 1995	Divisions of Hematology and Oncology, New York University School of Medicine, New York, NY; "Studies of the <i>DCC</i> gene in normal and neoplastic tissues"
November 6, 1995	American Association for Cancer Research Special Conference in Cancer Research on Cancer: The Interface Between Basic and Applied Research. Baltimore, MD; "Studies of the DCC Gene: A Candidate Tumor Suppressor Gene from Chromosome 18q"
January 12, 1996	Cancer Center Grand Rounds, University of Michigan Medical Center, Ann Arbor, MI; "Update on the Molecular Genetics of Colorectal Cancer"
February 6, 1996	University of Illinois at Chicago, MD-PhD Program; "The Molecular Genetics of Colorectal Cancer: Potential Applications to Clinical Care"
February 6, 1996	University of Illinois at Chicago, Department of Microbiology and Immunology, "Studies of the DCC Gene in Normal and Neoplastic Tissues"
March 18, 1996	Medical Grand Rounds, University of Michigan Medical Center, Ann Arbor, MI; "Clinical Applications of Findings on The Genetics Basis of Colorectal Cancer"
March 27, 1996	Exelixis Pharmaceuticals, Cambridge, MA; "The Role of the DCC Gene in Tumorigenesis and Development"
April 30, 1996	Les Fondation des Treilles Meeting on "Signalling Pathways, Cell Fate Determination and Cancer"; Salerne, France; "Studies of the DCC gene in cancer and development"
May 6, 1996	Nobel Symposia Series on "Colorectal Neoplasia - Morphological, Clinical, and Molecular Genetic Aspects"; Stockholm, Sweden;
"The role in colorectal May 18, 1996	of genetic alterations in chromosome 18q and the DCC gene tumorigenesis"
	American Society of Clinical Oncology Presidential Symposium on "Genetic Testing for Cancer: The Biologic, Clinical, and Ethical Implications"; Philadelphia, PA; "Progress toward a molecular description of colorectal cancer: biological implications and clinical applications"
June 6, 1996	Mayo Cancer Center Grand Rounds, Mayo Clinic, Rochester, MN; "Studies of the DCC gene in cancer and development"
June 28-July 5, 1996	American Association for Cancer Research Workshop "Molecular Oncology in Clinical Oncology"; Aspen, CO; "Molecular genetics of colorectal cancer: biology and clinical implications"
September 19, 1996	London Regional Cancer Centre, London, Ontario, Canada. "The DCC gene - tumorigenesis and cell guidance molecules."
October 31, 1996	Samuel Lunenfeld Research Institute, Mount Sinai Hospital, Toronto, Ontario, Canada; "Studies of the DCC gene- is there a link between tumorigenesis and cell guidance molecules?"
November 1, 1996	University of Toronto, Toronto, Ontario, Canada. 1996 Update on Digestive Diseases for Physicians and Surgeons, Gastrointestinal Malignancies: An Update. "Colon cancer: Is it all in the genes?"

January 7, 1997	Cleveland Clinic Foundation, Cleveland, Ohio. Horizons Seminar Series. "Progress Towards a Molecular Description of Colorectal Cancer - Biological Implications and Clinical Applications"
January 8, 1997	Cleveland Clinic Foundation Research Institute, Department of Cancer Biology, Cleveland, Ohio. "The DCC Gene: Is There a Connection Between Tumorigenesis and Cell Guidance Molecules?"
January 13, 1997	University of Chicago, Hematology/Oncology Section, Chicago, IL. "Studies of the DCC Gene: Tumorigenesis and Cell Guidance"
Jan. 27-Feb. 2, 1997	Co-organizer, Keystone Symposia entitled "Genetics of Human Cancer: Pathogenesis and Diagnosis", Keystone, CO
February 20, 1997	American Cancer Society National Conference on "State of the Art in Cancer Genetics: Societal and Clinical Implications of DNA Testing"; Dallas, TX; lecture entitled: "Role of Genetic Mutations in the Pathogenesis of Cancer"
March 12-13, 1997	Maine Medical Center 9th Annual Gastroenterology Symposium, Carrabassett Valley, Maine; "Molecular Biology of Colorectal Cancer" and "Clinical Applications of Genetic Testing in Colorectal Cancer"
May 23, 1997	Department of Experimental Oncology, St. Jude Children's Research Hospital, Memphis, TN; "DCC: Connections between tumorigenesis and cell guidance."
June 27-July 3, 1997	American Association for Cancer Research Workshop "Molecular Biology in Clinical Oncology; Aspen, CO; "Colorectal Cancer: Molecular Genetic Studies and Their Clinical Applications"
July 8, 1997	Sapporo Cancer Research Symposium on "Cytoskeleton and G Proteins in the Regulation of Cancer"; Hokkaido University, Sapporo, Japan; "DCC: Linking tumorigenesis and cell guidance mechanisms?"
July 11, 1997	National Cancer Center Research Institute, Tokyo, Japan; "Studies of the DCC gene: Is there a connection between tumorigenesis and cell guidance?"
August 5, 1997	FASEB Meeting on "Gastrointestinal Tract VII: Development, Differentiation, and Adaptation"; Copper Mtn., CO; "Regulation and function of the DCC protein in normal and neoplastic cells"
October 28, 1997	Grand Rounds, Division of Medicine, M.D. Anderson Cancer Center, Houston, TX; "Progress towards a molecular description of colorectal cancer: The present realities and implied promises"
October 29, 1997	M.D. Anderson Cancer Center 50th Annual Symposium on Fundamental Cancer Research "Molecular Determinants of Cancer Metastasis", Houston, TX; "The role of the DCC gene in tumor progression"
November 5, 1997	Emory University School of Medicine; Atlanta, GA, Winship Cancer Center Elkin Lecture Series; "Genetics of Colorectal Cancer"
December 2, 1997	Parke-Davis Pharmaceutical Research Signal Transduction Seminar Series, Ann Arbor, MI; "Colorectal cancer: has progress toward a molecular description yielded new therapeutic targets?"
December 12, 1997	Fox Chase Cancer Center, Philadelphia, PA; "Human Cancer Syndromes"
February 17, 1998	University of San Antonio Institute of Biotechnology, San Antonio, TX; "Colorectal cancer genetics and the DCC gene"
March 10, 1998	University of Alabama at Birmingham School of Medicine, UAB Comprehensive Cancer Center, Birmingham, AL; "The Genetics of Colorectal Cancer"
June 8, 1998	Albert Einstein School of Medicine, Cancer Center Lecture Series, Bronx, NY; "Colorectal cancer genetics: studies of the DCC, beta-catenin-APC, and CDX-2 pathways"

July 3-9, 1998	American Association for Cancer Research Workshop "Molecular Biology in Clinical Oncology"; Aspen, CO; "The genetics of colorectal cancer: biological insights and clinical applications"
September, 24, 1998	Karmanos Cancer Institute Seminar Series, Detroit, MI: "Colorectal Cancer Genetics"
October 20, 1998	William Beaumont Hospital, Gastroenterology Research Conference, Royal Oak, MI; "Colorectal Cancer Genetics: Insights into Pathogenesis and Potential Clinical Applications"
October 23, 1998	Ohio State University Comprehensive Cancer Center Grand Rounds; Columbus, OH; "The Genetics of Colorectal Cancer: Biological Insights and Clinical Applications"
November 5, 1998	UT MD Anderson Meeting on "Biologic Principles for the Therapy of Human Colon Cancer"; San Diego, CA; "Oncogenes and Tumor Suppressor Genes in Colorectal Tumor Progression"
November 17, 1998	29 th Annual Princess Takamatsu Cancer Research Fund Symposium on "Molecular Basis for Invasion and Metastasis"; Tokyo, Japan; "Tumor Suppressor Gene Pathway Defects in Colorectal Cancer Invasion and Metastasis"
December 8, 1998	David Nathan Lecture Series at the Dana Farber Cancer Institute, Boston, MA; "Colorectal Cancer Genetics: Tumor Suppressor and Candidate Tumor Suppressor Gene Pathways"
April 3, 1999	Keystone Symposium on Molecular Mechanisms for Gastrointestinal Cancer, Keystone, CO; "Tumor Suppressor Pathway Defects in Colon Cancer"
April 13, 1999	American Association for Cancer Research Annual Meeting, Philadelphia, PA; Symposium on "Invasion and Metastasis"; "Tumor Suppressor Gene Pathway Defects in Colorectal Cancer Invasion and Metastasis"
June 2, 1999	Maine Medical Center 9 th Annual Cancer Symposium, Portland, ME; George Sager Lecture - "The Genetics of Colorectal Cancer: Insights into Pathogenesis and New Opportunities for Clinical Advances"
July 22, 1999	American Association for Cancer Research "Pathobiology of Cancer" Course, Keystone, CO; "Colorectal Cancer Pathogenesis"
December 2, 1999	Institute for Molecular Biology and Biotechnology, McMaster University, Hamilton, Ontario, Canada; "Role of Defects in APC and β - and γ -catenin in Cancer"
December 14, 1999	Derald H. Ruttenberg Cancer Center, Mount Sinai School of Medicine, New York, NY; "Tumor Suppressor Gene Pathway Defects in Colon Cancer"
February 3, 2000	Department of Pathology Grand Rounds, Yale University School of Medicine, New Haven, CT; "Genetic Alterations during Colorectal Cancer Development"
February 15, 2000	National Cancer Institute Sponsored symposium - GI Cancer: State of the Science Symposium, Washington, DC; "Present Status of Our Understanding of Colon Cancer Pathogenesis"
February 22, 2000	Department of Biochemistry, University of Michigan, Ann Arbor, MI; "The Role of APC and Catenin Defects in Cancer"
March 1, 2000	Biomedical Sciences Cluster Committee on Cancer Biology Seminar Series, University of Chicago, Chicago, IL; "The Role of β -catenin/Tcf Pathway Defects in Cancer"
March 3, 2000	Molecular Pathogenesis of Cancer Training Program, Medical College of Ohio, Toledo, OH; "The Role of APC and β -catenin Defects in Cancer"
March 27-28, 2000	Lynch Lecture Series, University of Notre Dame, Department of Biology, Molecular Biosciences Program; "Progress in Colon Cancer Genetics: Insights into Pathogenesis and Clinical Applications"; "The Role of Defects in APC and Catenins in Cancer"

May 11, 2000	McGill Colon Cancer Conference, Montreal, Canada; "Tumor Suppressor Pathways in Colon Cancer"
May 20, 2000	36 th Annual American Society of Clinical Oncology Meeting, New Orleans, LA; Chair, Educational Session entitled "What's New in Colorectal Cancer?" Presenter – "Update on the Molecular Basis of Colorectal Cancer"
May 23, 2000	Digestive Disease Week/AGA Annual Meeting, San Diego, CA; State of the Art Lecture on "Pathways of Colon Carcinogenesis"
June 13, 2000	EPA-George Washington University Course on Mechanisms of Carcinogenesis, Crystal City, VA; "Signaling Networks in Carcinogenesis"
August 8, 2000	Gordon Research Conference on Cancer, Newport, RI; "Contributions of APC/Catenin Defects to Colon Cancer"
March 9, 2001	USCAP Educational Session on "Molecular Oncology", USCAP Annual Meeting, Atlanta, GA; "The Colon Cancer Paradigm"
April 2, 2001	Harvard Digestive Diseases Center 2001 Symposium on "Signaling Mechanisms in Epithelial Malignancies"; "The Role of APC and Catenin Defects in Colorectal Cancer"
April 12, 2001	Cardinal Bernadin Cancer Center Clinical and Translational Seminar Series; Loyola University Medical Center, Chicago, IL; "Role of APC and Catenin Defects in Cancer"
April 27, 2001	Vanderbilt-Ingram Cancer Center, Signal Transduction & Cell Proliferation Program, Nashville, TN; "Defects in APC and Catenin Regulation in Cancer"
May 25, 2001	Division of Hematology/Oncology and Ireland Cancer Center, Case Western Reserve University School of Medicine, Cleveland, OH; "The Role of APC and Catenins in Cancer"
June 29-July 5, 2001	Course Faculty for American Association for Cancer Research Workshop on "Molecular Biology in Clinical Oncology", Aspen, CO; Lecture (7/4/01) – "Molecular Insights into Colorectal Cancer Pathogenesis"
August 24, 2001	Walther Cancer Institute Annual Retreat, University of Michigan; "Molecular Insights into Colorectal Cancer Pathogenesis"
September 13, 2001	American Association for Cancer Research International Conference on "Molecular Mechanisms of Gastrointestinal Cancer Development and Its Clinical Implications"; Seoul, Korea; "Role of APC and Catenin Defects in Cancer"
October 24, 2001	Stanford University Division of Oncology Annual Research Retreat; Pacific Grove, CA; "Gene Defects in Colorectal Cancer"
February 22, 2002	Kimmel Cancer Center, Thomas Jefferson University, Third Annual Symposium - "Scientific and Clinical Update on Colorectal Cancer"; Philadelphia, PA; "Role of APC and Catenin Defects in Colorectal Cancer"
March 9, 2002	Keystone Symposium on "Wnt and β -catenin Signaling in Development and Disease"; Taos, NM; "Role of APC and Catenin Defects in Cancer"
June 28-July 4, 2002	Course Faculty for American Association for Cancer Research Workshop on "Molecular Biology in Clinical Oncology", Aspen, CO; Lecture (7/1/02) – "Molecular Insights into Colorectal Cancer Pathogenesis"
August 4-8, 2002	Chair, Gordon Research Conference on Cancer, Salve Regina University, Newport, Rhode Island
September 5, 2002	Keynote Lecture at 13 th Meeting of the Japanese Society for Gastroenterological Carcinogenesis, Osaka, Japan; "Insights into the Molecular Alterations Underlying the Pathogenesis of Colorectal Carcinoma"
September 18, 2002	"Cells, Development, and Cancer Seminar Series", University of Colorado Health Science Center, Denver, CO; "Role of APC and Catenin Defects in Cancer"

September 27, 2002	Central Society for Clinical Research Annual Meeting, Chicago, IL; Career Development 101 Session; "How to Present a Talk"
September 28, 2002	ASCO/NCI Scientific Symposium on "Molecular Oncology for the Clinical Oncologist", Chicago, IL; "Overview of Molecular Approaches in Cancer Pathogenesis, Diagnosis, and Treatment"
October 22, 2002	Royal Netherlands Academy of Arts and Sciences Colloquium on "Wnt Signaling in Development and Cancer", Amsterdam, Netherlands; "Downstream Target Genes and Co-Factors of β -catenin in cancer"
November 12, 2002	Siteman Cancer Center Cancer Genetics Program Seminar Series, Washington University School of Medicine, St. Louis, MO; "Molecular Insights into Colorectal Cancer Pathogenesis"
November 20, 2002	Massachusetts General Cancer Center Seminar Series, Charlestown, MA; "Molecular Studies of Colorectal Cancer Pathogenesis"
December 3, 2002	University of Minnesota Cancer Center Seminar Series, Minneapolis, MN; "Molecular Basis of Colorectal Cancer Pathogenesis"
December 18, 2002	Van Andel Research Institute, Grand Rapids, MI; "Molecular Basis of Colorectal Cancer Pathogenesis"
January 5, 2003	Gordon Research Conference on Cancer Genetics and Epigenetics, Ventura, CA; "Genetic and Epigenetic Mechanisms Underlying Cadherin and Catenin Defects in Cancer"
April 16, 2003	University of Kentucky Markey Cancer Center Distinguished Cancer Center Professor Professorship seminar series; Lexington, KY; "Genetic and Epigenetic Mechanisms Underlying Cadherin and Catenin Defects in Cancer"
May 6, 2003	Institute for Cancer Genetics, Columbia University School of Medicine, New York, New York; "Genetic and Epigenetic Mechanisms Underlying Cadherin and Catenin Alterations in Cancer"
June 12, 2003	Department of Gastrointestinal Medical Oncology, Division of Cancer Medicine, University of Texas-M.D. Anderson Cancer Center, Houston, Texas; "Molecular Pathogenesis of Colorectal Cancer"
November 20, 2003	Tumor Cell Biology Program, Robert Lurie Cancer Center of Northwestern University School of Medicine, Chicago, IL; "The Nature and Role of β -catenin and E-cadherin Defects in Cancer"
December 8, 2003	Cell Biology & Anatomy and the Arizona Cancer Center, University of Arizona School of Health Science Center, Tucson, Arizona; "Cadherin and Catenin Defects in Cancer"
May 12, 2004	Dana-Farber Cancer Institute – GU and GI Oncology Research Programs, Boston, MA; Unexpected actions of secreted Wnt pathway antagonists"
May 20-23, 2004	Co-organizer for 2004 Wnt Meeting, held at University of Michigan Power Center/Michigan League; 375 registrants; 53 platform presentations; 95 poster presentations
May 20, 2004	Platform Presentation at 2004 Wnt Meeting, University of Michigan, Ann Arbor, MI; "SFRP1 Antagonizes β -catenin via a novel degradation pathway that does not require GSK3 β or Siah function"
March 8, 2005	Fox Chase Cancer Center Symposium on "Cancer Genetics 2005: Focus of Colon and Ovarian Cancers Bridging Science and Practics"; Philadelphia, PA; "Insights into Somatic Defects in Colorectal Cancer Pathogenesis and Significance of the Findings for Clinical Management"
March 30, 2005	Molecular Medicine Seminar Series, University of Connecticut Health Science Center, Farmington, CT; "Molecular Pathogenesis of Gastrointestinal Cancer"
May 5, 2005	GlaxoSmithKline, Research and Development, Collegeville, PA; "Molecular pathogenesis of colorectal cancer: insights and clinical significance"

October 25, 2005	New York Academy of Sciences, New York, NY; Symposium on Therapeutic Opportunities of the Wnt Signaling Pathway in Cancer; “Beta-catenin Dysfunction in Intestinal Tumorigenesis”
November 14, 2005	3 rd Annual DSR Sarma Lectureship in Oncologic Pathology, University of Toronto Faculty of Medicine, Department of Laboratory Medicine & Pathology; “Molecular Insights into Colorectal Cancer Pathogenesis and Implications for Clinical Management”
December 1, 2005	Vanderbilt-Ingram Cancer Center Grand Rounds, Vanderbilt University School of Medicine; “Contribution of Beta-catenin Defects to Cancer”
April 29, 2006	ASCI Presidential Address, ASCI-AAP Annual Meeting, Chicago, IL; “Opportunities and Challenges for the Physician-Scientist in 2006: Some Objects in Mirror Are Closer Than They Appear”
December 12, 2006	UT-MD Anderson Cancer Center, Department of Cancer Biology Cancer Metastasis Research Program Seminar Series, Houston, TX; “Role of β -catenin Defects in Cancer”
February 5, 2007	Department of Pathology Research Seminar, Case Western Reserve University School of Medicine, Cleveland, OH; “Clinical Implications of Advances in Understanding of the Molecular Pathogenesis of Colorectal Cancer”
April 9, 2007	Medical Scientist Training Program Seminar, University of Iowa School of Medicine, Iowa City, IA; “Clinical Implications of Advances in Understanding of the Molecular Pathogenesis of Colorectal Cancer”
September 18, 2007	Department of Pathology Research Seminar, UT Southwestern University School of Medicine, Dallas, TX; “Insights into the Molecular Pathogenesis of Colorectal Cancer”
April 29, 2008	University of Texas Medical Branch Sealy Center for Cancer Cell Biology Distinguished Guest Lecture Series, Galveston, TX; “The Molecular Pathogenesis of Colorectal Cancer”
May 8, 2008	Oklahoma Medical Research Foundation Research Forum, Oklahoma City OK; “Insights into the Molecular Pathogenesis of Colorectal Cancer”
September 5, 2008	UT Southwestern Medical Center, Dallas TX; UT Southwestern Cancer Center Grand Rounds; “Molecular Pathogenesis of Colorectal Cancer”
October 10, 2008	Wayne State Medical School, Department of Pharmacology Research Seminar, Detroit MI; “Molecular Pathogenesis of Colorectal Cancer”
April 12, 2010	Genentech Pathology Seminar Series; “Modeling the Molecular Pathogenesis of Cancer in the Mouse”

PATENT APPLICATIONS:

Issued:

- 1) WO/1992/005262 – Frost P, Vogelsein B, Chernajovsky Y, **Fearon ER**, Pardoll D. “Methods and composition for genetic therapy and potentiation of anti-tumor immunity.
- 2) US Patent 66677312 (Issued Jan 13, 2004) – Vogelstein B, Baker S, **Fearon ER**, Nigro JM. “Methods for restoring wild type p53 gene function”
- 3) US Patent 7,267,955 B2 (Issued Sept 11, 2007) – Vogelstein B, Baker S, **Fearon ER**, Nigro JM. “Method for detecting loss of wild-type p53”
- 4) WO/2010/014798 – Showalter HD, Turbiak AJ, **Fearon ER**, Bommer GT. “PYRIMIDOTRIAZINEDIONES AND PYRIMIDOPYRIMIDINEDIONES AND METHODS OF USING THE SAME”

BIBLIOGRAPHY

Peer-Reviewed Publications

1. **Fearon ER**, Love WE, Magnus KA, Lamy J, Lamy J. Crystals of subunits 2 and 4 of hemocyanin from the Tunisian scorpion, *Androctonus australis*. *Life Chemistry Reports* 1983; 1:65-8.
2. **Fearon ER**, Kazazian HH, Waber PG, Lee JJ, Antonarakis SE, Orkin SH, Vanin ER, Henthorn PS, Grosveld FG, Scott AF, Buchannan GR. The entire β -globin gene cluster is deleted in a form of $\gamma\delta\beta$ -thalassemia. *Blood* 1983; 61:1273-8.
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In Press Research Manuscripts

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Non-Peer Reviewed Publications - Review Articles and Editorials

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